

REMARKS

Applicants have received and carefully reviewed the Office Action mailed October 3, 2005, setting a shortened statutory period for reply ending January 3, 2006. Claims 1-60 and 63-64 are pending, with claims 63-64 newly presented and various claims withdrawn from consideration as indicated in the listing of the claims. Reconsideration and reexamination are respectfully requested.

In light of the previous restriction requirement, Applicants have cancelled claims 61-62 without prejudice.

In paragraph 6 of the Office Action, the drawings were objected to because certain reference numerals were not referenced in the text. Replacement Figures 10 and 13 are submitted herewith, with reference numerals 204, 233 and 234 removed. It is believed that the objection is overcome by these amendments.

On pages 3-4 of the Office Action, in paragraphs 7-8, the Examiner objected to the Abstract. Applicants have amended the Abstract for brevity and have reduced the number of words in the Abstract. It is believed that the objection is overcome.

In paragraph 9 of the Office Action, the disclosure was objected to as using an incorrect term. Specifically, InGaS was written, rather than the correct InGaAs. Correction is provided above, and it is believed that the objection is overcome.

In paragraph 11 of the Office Action, claims 29, 30, 35 and 43 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,929,398 to Bates.

In paragraph 13 of the Office Action, claims 37-40 and 42 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bates in view of U.S. Patent No. 5,784,507 to Holm-Kennedy et al.

In paragraph 14 of the Office Action, claims 1, 2, 9, 11 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bates in view of U.S. Patent No. 5,870,188 to Ozaki et al.

In paragraph 15 of the Office Action, claims 13-16 and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Bates in view of Ozaki et al. and further in view of Holm-Kennedy et al.

Each of these rejections includes an assertion (either explicit or by reference to another rejection) to the effect that “Bates discloses a spectrometer” and/or Bates discloses “a spectroscopic system including a light source.” Applicants can find no such disclosure of a spectroscopic system and/or a light source in the Bates reference. The Examiner cites column 1, lines 4-13, as disclosing a spectroscopic system including a light source. The cited text reads as follows:

The present invention relates to an apparatus for measuring or analyzing a physical characteristic of a signal, such as may involve electromagnetic radiation, and, more particularly, to a device for determining the wavelength of light from a laser or other narrowband source. In the present specification, the term “light” will be used as a generic term to include any electromagnetic radiation whose wavelength is to be measured, and is not intended to be limited to the visible spectrum.

(Emphasis Added.) (Bates at column 1, lines 4-13.) In contrast to the rejection, Bates is designed for capturing light from an unknown source. Bates is directed toward a detector that provides an output capable of providing an immediate and easily interpreted readout that indicates the wavelength of received light from an unknown source. (See Bates at column 1, lines 16-18.) Bates even suggests a “digital” output in which captured wavelengths of light are given either a “0” or a “1”, yielding an output that does not indicate the magnitude received at individual wavelengths, or even a relative measure of magnitudes received at a plurality of wavelengths, as would be typical for a spectroscopic system.

Spectrometers and spectroscopic systems are used to analyze a specimen or sample of interest and are recited in Applicants’ claims, including independent claim 29. None of the systems proposed by Bates are spectroscopic systems or spectrometers. Therefore, Applicants believe that the §102(b) rejection should be withdrawn.

Further, Applicants believe that each of the §103(a) rejections are improper because the Examiner has not established how or why it would be obvious to modify Bates to provide a spectroscopic system. Because the burden of a *prima facie* case of obviousness lies with the Examiner, each of these rejections should be withdrawn as well.

To the extent that the §103 rejections suggest some modification of Bates, Applicants assert that at least some modifications would be inappropriate. Specifically, the modification to

include a sampler, suggested in light of Ozaki et al., would render the device disclosed by Bates unusable for its intended purpose.

Specifically, Applicants note the following portion of the rejection in paragraph 14:

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the spectrometer of Bates include a sampler for transmitting light into the sample and for receiving the non-absorbed light from the sample and being disposed adjacent to the detector, as taught by Ozaki et al., for the purpose of increasing the sensitivity of the light scattering.

The transmission of light into a sample is not a part of Bates because, as discussed above, Bates operates to receive light from an unknown source and identify the frequency content being generated by the unknown source.

The rejection suggests that modification to include a sampler would "increase the sensitivity of the light scattering". To the extent this is understood, preserving the spatial/directional characteristics of the incoming light between the filter and the encoder is necessary to the device of Bates, to allow received wavelengths to be identified. Placing a sampler between the filter and the encoder would introduce dispersion that would render the encoder less useful/effective, and make the whole device inaccurate. Placing the sampler between the filter and the unknown source seems rather less likely, since the location of the source is not apparent. Placing the sampler between the encoder and the detectors would make it impossible to determine what the incoming light wavelengths are because the sampler would block light from being received, or at least redirect light from, at least those detectors placed near/in line with the sampler.

Holm-Kennedy et al. is cited to illustrate dielectric bandpass filters and/or one or more nonlinear variable filters. Ozaki et al. is cited to show the inclusion of a sampler, which has been discussed above and would constitute an inappropriate modification of the Bates reference.

In light of the above, each of the rejections relying on Bates, either alone or in combination, should be withdrawn. Specifically, a *prima facie* case of unpatentability, either by anticipation or obviousness, cannot be stated relying on Bates, which does not teach or fairly suggest a spectroscopic system.

Claims 1 and 29 are believed to be in condition for allowance. Therefore, it is requested that withdrawn claims 8, 10, 12, 17, 20-28, 36, 41 and 44-52 also be considered and allowed in light of their dependence from allowable generic claims.

Applicants would like to thank the Examiner for noting the allowability of claim 53.

In paragraph 17, claims 3-7 and 31-34 were objected to as being dependent upon rejected base claims, but were noted as allowable if rewritten. Because it is believed that each of claims 1 and 29 are in condition for allowance, these objections are believed to be moot.

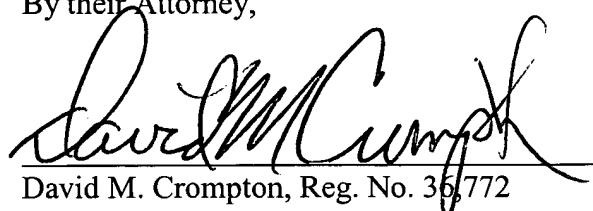
Applicants have added newly presented claims 63-64. Claim 63 depends from claim 1 and further recites that the sampler is configured to receive the filtered, encoded light from the encoder. Newly presented claim 64 depends from claim 29 and recites that the encoding unit is operable to select at least a first subset of the passbands of light or a second subset of the passbands of light for transmission to a sampler adapted to interrogate a biological sample. Applicants assert that, at least for the reasons given relative to respective claims 1 and 29, and other reasons, claims 63-64 are in condition for allowance.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By their Attorney,



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Attachment: 13 Replacement Drawing Sheets

Amendments to the Drawings

The attached sheets of drawings include changes to Figures 10 and 13. The sheet which includes Figure 10 replaces the original sheet including Figure 10, and the sheet which includes Figure 13 replaces the original sheet including Figure 13. Figure 10 has been amended to remove reference numeral 204. Figure 13 has been amended to remove reference numerals 233 and 234. No new matter has been added by these amendments. All other sheets of drawings submitted herewith do not include any amendments.

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